

DCBL/RGP/ENV/ ECHC//298/2022

Date: 01.06.2022

To  
**The Additional Director, Government of India**  
**Ministry of Environment, Forest & Climate Change (I.A. Division)**  
**Indira Paryavaran Bhavan, Aliganj, Jorbagh Road**  
**New Delhi – 110003**

Sub:- Submission of six monthly compliance report (October 2021 to March 2022) of Environment Clearance letter F. No. J-11011/352/2005- 1A II (I) dated 5<sup>th</sup> April 2007. of M/s Dalmia Cement (Bharat) Limited, Rajgangpur, Tehsil-Rajgangpur, District – Sundargarh, Odisha.

Ref:- Environment Clearance letter F. No. J-11011/352/2005- 1A II (I) dated 5<sup>th</sup> April 2007.

Dear Sir,

With reference to above letter, we enclose herewith the six monthly compliance report (Ending March, 2022) of conditions stipulated in the Environmental Clearance for the Cement plant.

Thanking you

For, **Dalmia Cement (Bharat) Limited, Rajgangpur**

  
**Dr. Satish Mishra**  
**Sr.G.M(Env.)/C.**

Encl: As above

Copy to:

1. **The Chairman,**  
**Central Pollution Control Board**  
**Parivesh Bhavan**  
**CBD – cum- Office Complex**  
**East Arjun Nagar**  
**NEW DELHI – 110032**

2. **The Director (S)**  
**Government of India**  
**Ministry of Environment and Forest**  
**Eastern Regional Office**  
**A/3, Chandrasekharapur**  
**BHUBANESWAR – 751023**

3. **The Chairman,**  
**State Pollution Control Board, Orissa**  
**Parivesh Bhavan, A/118, Nilakanthnagar, Unit – VIII**  
**BHUBANESWAR - 751012**

**SIX MONTHLY COMPLIANCE REPORT**

**(OCTOBER, 2021 TO MARCH, 2022)**

**OF**

**ENVIRONMENT CLEARANCE LETTER NO.**

**J-11011/352/2005-1A II (I) dated 5<sup>th</sup> April 2007**

**BY**

**DALMIA CEMENT (BHARAT) LIMITED**

**RAJGANGPUR – 770017**

**DIST- SUNDARGARH**

**ODISHA**

**Six monthly compliance report (October, 2021 to March, 2022) of conditions stipulated in Environmental Clearance Letter No. F. No. J-11011/352/2005-1A II (I) dated 5<sup>th</sup> April 2007, by MoEF&CC for Dalmia Cement (Bharat) Limited, Rajgangpur.**

## A. SPECIAL CONDITION

SI. No.	Description of Conditions	Compliance Status
i	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Orissa State Pollution Control Board (OSPCB). At no time the particulate emissions shall exceed OSPCB. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit is shut down automatically.	<p>a. Complied.</p> <p>b. The compliance status of Stack emission is given below. The reading taken from different location are stipulated with respect to the standard prescribed within the norms of emission level. We have installed all the pollution control equipment in order to meet new emission standards, as revised by Gazette Notification G.S.R. 497 (E) dtd. 10<sup>th</sup> May, 2016. Online CEMS (Continuous Emission Monitoring system) have been installed and facility for transmitting online data to OSPCB/CPCB. The gaseous and particulate matter emissions most of time are within the prescribed limits. Action plan for the compliance of notified emission norms, as per the directions under Sec. 5 of The EP Act, 1986 have been submitted for further improvement. We have been also conducted third party monitoring through an accredited agency empaneled by OSPCB. Stack emission monitoring monthly average report is given in <b>Annexure-I</b> Additional measures are being taken for operating practices of pollution control equipment. Tripping in kiln ESP is minimized. Facility have been provided to control emission in the event of any tripping or kiln shut down condition.</p>
ii	Continuous on-line monitoring system to monitor gaseous emission shall be controlled with in 50 mg/Nm <sup>3</sup> by installing adequate air pollution control system. On-line monitoring data shall be submitted to the OSPCB and CPCB regularly.	Complied. Continuous stack monitoring system has already been installed. On-line data through CEMS and CAAQMS are being transmitted to OSPCB/CPCB. Stack monitoring and Ambient air quality monitoring reports are submitted to SPCB in every month and half yearly basis to Regional office of MoEF&CC, Bhubaneswar.
iii	Ambient Air Quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and stack emission shall be carried out regularly in consultation with OSPCB and report submitted to the OSPCB quarterly and to the ministry's Regional office at Bhubaneswar half - yearly. One ambient air quality monitoring station shall be installed in	<p>a. Monitoring of ambient air quality is carried out regularly in consultation with SPCB. The values are within the prescribed limit as stipulated under EPA/SPCB. Similarly, data on ambient noise level are within the stipulated norm, as furnished in <b>Annexure-I</b></p> <p>b. Monitoring of ambient air quality and stack emission is carried out regularly in consultation with OSPCB and report is being submitted to the OSPCB on monthly basis and to the Ministry's Regional Office at Bhubaneswar on be half-yearly basis.</p>

	downwind direction.	
iv	The company shall install adequate dust collection and extraction system to control fugitive dust emission at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. ESP to Cooler, cyclone & bag filter to kiln, CVRM and bag filters shall be provided in the coal mill and cement mills to control air emissions less than 50 mg/ Nm <sup>3</sup> . Jet pulse bag filters/ dust extraction system shall be provided to control fugitive emissions in raw material, coal handling & cement grinding areas. Dust suppression system at unloading hoppers, discharge gate of silos and totally closed operations for all belt conveyors & storage etc shall be used. Raw materials shall stored in closed roof sheds & clinker in silos.	<p><b>Air pollution control measures &amp; systems are adopted:</b></p> <ol style="list-style-type: none"> <li>Dust collection extraction system (Bag filters) have been installed and maintained at various transfer points such as loading/ unloading areas. Raw materials are transported through closed conveyor belts.</li> <li>Coal handling, cement grinding units are equipped with bag filters to control fugitive dust emissions.</li> <li>Bag house installed for CVRM &amp; Coal mill to maintain stack emission as per standard.</li> <li>Road sweeping machines are deployed on regular cleaning of roads. Internal roads are concreted and water sprinkling on the roads are also carried out.</li> <li>Belt conveyors are thoroughly hood covered.</li> <li>Clinker is stored in clinker silo &amp; transported by hatch adopter system.</li> <li>Raw material handling &amp; its storing is carried out by closed shed.</li> <li>Water sprinkling dust suppression systems are installed at raw material handling yards.</li> </ol>
v	Asphalting/concerning of roads and water spray all around the coals stockpiles shall be carried out to control fugitive emissions.	Concreting and black-topping or paving with hard solid reject Refractory bricks are completed. Road sweeping machines deployed & water spray in coal stockpiles are being done as per requirement to control the fugitive emission.
vi	Total water requirement from the Nakti nala and ground water source shall not exceed 5,788 m <sup>3</sup> /d including 785 m <sup>3</sup> /d respectively and prior permission for the drawl of ground water from the State water resources/Minor irrigation Deptt./CGWA shall be obtained. All the treated waste water shall be recycled and reused in the process, dust suppression, green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted. Domestic effluent treated in Sewage Treatment Plant (STP) shall be used for green belt development within the plant and colony area.	<ol style="list-style-type: none"> <li>It is ensured that the water consumption shall not exceed the quantity mentioned and ground water source respectively.</li> <li>The treated water of ETP is reused. There is no effluent discharged outside the factory premises and "zero" discharge is adopted.</li> <li>Domestic sewerage is treated in STP. The treated water is used for green belt development.</li> </ol>
vii	All the cement dust collected from pollution control devices shall be recycled and reutilized in the process. Char from sponge iron plant of M/s. OCL shall be used as raw material in manufacturing cement and mixed with feed. Hazardous waste viz. Used oil from gear boxes and automotive batteries, etc shall be properly stored in a designated area and sold to authorized	<ol style="list-style-type: none"> <li>Dust collected from pollution control devices is recycled and reutilized in the process.</li> <li>Char is used as raw material, as per availability.</li> <li>Used oil &amp; batteries are stored at earmarked area and disposed off through the authorized recyclers/ re processors.</li> </ol>

	recyclers/ re processors.																																																				
viii	The company must harvest the rainwater from the roof tops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	<p>Following rain water harvesting projects are existing</p> <p>a. Rain water harvesting by storm water drain have been made inside plant &amp; near CPP.</p> <p>b. Roof top rain water-harvesting is being practices in some part of colony areas.</p> <p>c. Rain water harvesting projects from the roof top of raw material shed inside the plant is also being carried out.</p>																																																			
ix	Green belt shall be developed in at least 28.0 ha out of total 91.15 ha land in consultation with the local DFO as per the CPCB guidelines.	<p>Green belt cover has already been developed in and around of plant. Distributing of saplings to nearby villagers and plantation are being carried out in regular basis. Statistical data with cumulative figure is given here under:</p> <table border="1"> <thead> <tr> <th colspan="3">DETAILS OF YEAR WISE PLANTATION (CUMULATIVE STATUS)</th> </tr> <tr> <th>YEAR</th> <th>NO. TREES PLANTED</th> <th>PLANTATION IN &amp; AROUND OF INDUSTRY/ SAPLING DISTRIBUTED</th> </tr> </thead> <tbody> <tr> <td>Up to march,2007-08</td> <td>148655</td> <td></td> </tr> <tr> <td>2008-2009</td> <td>155155</td> <td>2300</td> </tr> <tr> <td>2009-2010</td> <td>162401</td> <td>4800</td> </tr> <tr> <td>2010-2011</td> <td>171757</td> <td>6964</td> </tr> <tr> <td>2011-2012</td> <td>177957</td> <td>9964</td> </tr> <tr> <td>2012-2013</td> <td>183957</td> <td>14164</td> </tr> <tr> <td>2013-2014</td> <td>190246</td> <td>19664</td> </tr> <tr> <td>2014-2015</td> <td>196660</td> <td>27664</td> </tr> <tr> <td>2015-2016</td> <td>203892</td> <td>92664</td> </tr> <tr> <td>2016-2017</td> <td>209442</td> <td>130364</td> </tr> <tr> <td>2017-2018</td> <td>212431</td> <td>138922</td> </tr> <tr> <td>2018-2019</td> <td>214819</td> <td>139922</td> </tr> <tr> <td>2019-2020</td> <td>245077</td> <td>139922</td> </tr> <tr> <td>2020-2021</td> <td>255577</td> <td>139922</td> </tr> <tr> <td>2021-2022</td> <td>288478</td> <td>151922</td> </tr> </tbody> </table>	DETAILS OF YEAR WISE PLANTATION (CUMULATIVE STATUS)			YEAR	NO. TREES PLANTED	PLANTATION IN & AROUND OF INDUSTRY/ SAPLING DISTRIBUTED	Up to march,2007-08	148655		2008-2009	155155	2300	2009-2010	162401	4800	2010-2011	171757	6964	2011-2012	177957	9964	2012-2013	183957	14164	2013-2014	190246	19664	2014-2015	196660	27664	2015-2016	203892	92664	2016-2017	209442	130364	2017-2018	212431	138922	2018-2019	214819	139922	2019-2020	245077	139922	2020-2021	255577	139922	2021-2022	288478	151922
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x	The company shall undertake eco-development measures including community welfare measures in the project area.	Company has been continuously doing eco-development work in the surrounding area.																																																			
xi	All the recommendation mentioned in the Charter on the Corporate Responsibility for Environmental Protection (CREP) shall be strictly followed.	It is being complied																																																			
xii	High calorific hazardous waste shall be used as fuel in the cement kiln. Accordingly, provision to be made in the kiln.	High calorific hazardous waste is being burnt in cement kiln. We have obtained Hazardous waste handling for co-processing authorization from SPCB, Odisha. Provision were made to utilize the hazardous and non-hazardous waste, as per the statute guideline.																																																			

xiii	Prior permission from the State Forest Department shall be obtained regarding likely impact of proposed expansion on the reverse forest viz. Gudiali RF (3km), Tunmura RF (6.5 km) Chudia RF (6.5 km) and Hathidhara R.F. (4 km) and recommendations/ suggestion, if any shall be implemented in a time bound manner.	The plant was constructed over non-forest land and an application to the Forest Deptt. Already submitted in this regard.
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## B. GENERAL CONDITION

Sl. No.	Description of conditions	Compliance Status																		
i	The project authority must adhere to the stipulation made by Orissa State Pollution Control Board and State Government.	All condition laid by Orissa state pollution control board is strictly abiding to all stipulations.																		
ii	No expansion or modification of the plant should be carried out without prior approval of this Ministry.	No expansion or modification have been made.																		
iii	Adequate number of ambient air quality- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including Regional Office at Bhubaneswar and OSPCB once in six months.	<p>a. Four numbers of ambient air quality monitoring stations are installed as per SPCB and CPCB guidelines.</p> <p>b. Data on ambient air quality and stack emission is submitted to SPCB/CPCB and MoEF&amp;CC</p>																		
iv	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. The treated waste water shall be recycled in the plant as well as utilization for plantation purposes.	<p>a. Waste water generated in the plant is being treated in the effluent treatment plant (ETP). The last analysis report of ETP outlet [w.r.t GSR 422(E)] is given here under.</p> <table border="1" data-bbox="1000 1240 1461 1536"> <thead> <tr> <th>Sl. No.</th> <th>parameter</th> <th>ETP outlet treated water</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>PH value</td> <td>7.3</td> </tr> <tr> <td>2</td> <td>Total suspended solids (mg/l)</td> <td>9.5</td> </tr> <tr> <td>3</td> <td>B.O.D (mg/l)</td> <td>30.0</td> </tr> <tr> <td>4</td> <td>C.O.D (mg/l)</td> <td>84.6</td> </tr> <tr> <td>5</td> <td>Oil &amp; Grease (mg/l)</td> <td>&lt;2.0</td> </tr> </tbody> </table> <p>b. The treated water is utilized in the plant for machineries cooling, sprinkling on road &amp; green belt development.</p>	Sl. No.	parameter	ETP outlet treated water	1	PH value	7.3	2	Total suspended solids (mg/l)	9.5	3	B.O.D (mg/l)	30.0	4	C.O.D (mg/l)	84.6	5	Oil & Grease (mg/l)	<2.0
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5	Oil & Grease (mg/l)	<2.0																		
v	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. Authorization from the OSPCB must be obtained for collection, storage, treatment and disposal of hazardous wastes.	Complied. Regular disposal of Hazardous waste, as per Rule are maintained and Form-IV is being submitted to OSPCB with required information.																		
vi	The overall noise levels in and around the plant area	Noise monitoring is being carried out regularly																		

	shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1986 viz. 75 dBA (day time) and 70 dBA (night time).	at specified locations. Following data is given herewith for four locations. Detail report is enclosed in Annexure-I
vii	The project proponent shall comply with all the environmental protection measures and safeguards recommended in the Environmental Impact Assessment / Environmental management Plan.	Complied
viii	As proposed in EIA / EMP, Rs.31.82 Crores and Rs.2.64 Crores earmarked toward the capital cost and recurring the expenditure / annum for environmental protection measures shall be used judiciously to implement the conditions as well as Ministry of Environment and forests as well as the State Government. The funds so provided shall not be diverted for any other purposes.	Complied.
ix	The Regional Office of this Ministry at Bhubaneswar / Central Pollution Control Board / OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly	Complied. Six monthly reports are being submitted regularly.
x	The project authorities should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the state pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> This shall be advertised within seven days from the date of issues of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	Complied
xi	The project Authorities shall inform the Regional Office as well as The Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied
xii	The Regional office of the Ministry at Bhubaneswar / Central Pollution Control Board / State Pollution Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Six monthly compliance report along with monitored data is being submitted regularly. Also, as per the notification, it is being sent by e-mail in soft copies.

# **ENVIRONMENTAL MONITORING REPORT**

**BASED ON DATA GENERATED**

**FROM**

**OCTOBER 2021 TO MARCH 2022**

**FOR**

**DALMIA CEMENT (BHARAT) LIMITED**

**At/Po: RAJGANGPUR, District: SUNDARGARH, ODISHA**

**AT**

**CEMENT PLANT (LINE – 1 & LINE - 2)**

**Prepared by: Environment Management Department  
Dalmia Cement (Bharat) Limited, Rajgangpur, Odisha**



## MONTHLY AVERAGE VALUE FOR PM EMISSION FROM STACKS:

Stack attached to	Particulate matter emission in mg/Nm <sup>3</sup>					
	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Cement VRM-1 B/F	22.14	18.23	9.93	9.96	10.04	18.15
Cement VRM-2 B/F	19.7	23.34	15.34	20.09	19.71	24.01
Cement VRM-3 B/F	11.91	12.59	9.92	11.63	11.6	11.22
Kiln & VRM BAG HOUSE,L-I	Under Shutdown	10.56	7.72	12.76	12.79	9.22
Coal Mill B/F, L-I	Under Shutdown	15.83	7.41	13.76	13.92	14.53
Cooler ESP, L-I	Under Shutdown	22.42	9.48	8.56	8.42	18.91
Kiln & VRM BAG HOUSE ,L-II	9.41	12.83	8.84	11.93	15.78	12.97
Coal Mill B/F, L-II	7.28	15.06	7.83	14.03	11.4	8.57
Cooler ESP, L-II	11.5	21.53	9.89	12.76	17.8	18.71

## AMBIENT AIR AVG.DATA (FROM OCTOBER 2021 TO MARCH 2022)

Location of sampling station	SO <sub>2</sub> (µg/m <sup>3</sup> )	NOX(µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Ozone (o <sub>3</sub> ) (µg/m <sup>3</sup> )	Lead (Pb) (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ) (µg/m <sup>3</sup> )	Benzene (C <sub>6</sub> H <sub>6</sub> ) (µg/m <sup>3</sup> )	Benzo(a) Pyrene (BaP) – particulate phase only (µg/m <sup>3</sup> )	Arsenic (AS) (µg/m <sup>3</sup> )	Nickel (Ni) (µg/m <sup>3</sup> )
Workshop building	5	15	47	18	< 20.0	< 0.4	< 0.1	60	< 0.5	< 0.1	< 0.2	< 12.0
Engineering hostel building	5	11	78	29	< 20.0	< 0.4	< 0.1	61	< 0.5	< 0.1	< 0.2	< 12.0
Near water harvesting area of CPP	5	11	79	29	< 20.0	< 0.4	< 0.1	86	< 0.5	< 0.1	< 0.2	< 12.0
Store building	5	20	68	26	< 20.0	< 0.4	< 0.1	71	< 0.5	< 0.1	< 0.2	< 12.0
Canteen building	5	20	88	34	< 20.0	< 0.4	< 0.1	60	< 0.5	< 0.1	< 0.2	< 12.0
Loco gate	6	17	57	22	< 20.0	< 0.4	< 0.1	97	< 0.5	< 0.1	< 0.2	< 12.0

## NOISE AVG,DATA(FROM OCTOBER 2021 TO MARCH 2022)

Particular	Sampling locations							
	Store building	Engineering hostel building	Loco gate	Near canteen	OCL township/ colony	Workshop building	CCR building	Near water harvesting area of CPP
Noise level(L day) during day time	67	59.5	67.3	55.6	58.7	60.5	69	60.5
Noise level (L night) during night time	63	55.8	61.9	53.6	53.1	59.8	64	58.2

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000674F  
REPORT NO: CPL/R/SE/MAR-22/80

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/18**  
Name of Stack Monitored : KILN & VRM LINE - 1  
Stack Connected To : KILN VRM  
Shape of Stack : Circular  
Date of Sampling : 07.03.2022  
Time of Sampling : 11 : 50 Hrs  
Method of Sampling : IS 11255 (Part - 1), (Part - 2) : 1985, RA 2019 & (Part - 7): 2005, RA 2017  
Sample Received on : 07.03.2022  
Date of Test : 08.03.2022

Ambient Temperature in °C : 32  
Stack Temperature in °C : 143  
Average Stack Gas Velocity in m/sec : 19.62  
Iso-kinetic Flow Rate in LPM : 27  
Duration of Sampling in minute : 37

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 07 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 9.53 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 324.4 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

*P. Sarseni*  
Test Done By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

This report refers to the values obtained at the time of testing and results related to the item tested. This report may not be reproduced in part or full without written permission of the Company.

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000673F  
REPORT NO: CPL/R/SE/MAR-22/79

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/20**  
Name of Stack Monitored : Coal Mill B/F, Line - 1  
Stack Connected To : Coal Mill Bag Filter  
Shape of Stack : Circular  
Date of Sampling : 07.03.2022  
Time of Sampling : 12 : 47 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2019  
Sample Received on : 07.03.2022  
Date of Test : 08.03.2022

Ambient Temperature in °C : 34  
Stack Temperature in °C : 74  
Average Stack Gas Velocity in m/sec : 7.82  
Iso-kinetic Flow Rate in LPM : 29  
Duration of Sampling in minute : 34

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	<b>: 08 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saveni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000672F  
REPORT NO: CPL/R/SE/MAR-22/78

FORMAT NO: CPL/FM/58


REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/19**  
Name of Stack Monitored : Cooler ESP, Line - 1  
Stack Connected To : Cooler, Line - 1  
Shape of Stack : Circular  
Date of Sampling : 07.03.2022  
Time of Sampling : 15 : 05 Hrs  
Method of Sampling : IS 11255 (Part - 1) : 1985, RA 2019  
Sample Received on : 07.03.2022  
Date of Test : 08.03.2022


Ambient Temperature in °C : 36  
Stack Temperature in °C : 285  
Average Stack Gas Velocity in m/sec : 9.03  
Iso-kinetic Flow Rate in LPM : 20  
Duration of Sampling in minute : 50

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 18 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

  
Test Done By

  
Verified By



  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000675F

FORMAT NO: CPLJFM58

REPORT NO: CPL/R/SE/MAR-22/81

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/23**  
Name of Stack Monitored : CVRM - 1, Line - 1  
Stack Connected To : CVRM - 1 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 08.03.2022  
Time of Sampling : 12 : 17 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2019  
Sample Received on : 08.03.2022  
Date of Test : 09.03.2022

Ambient Temperature in °C : 34  
Stack Temperature in °C : 97  
Average Stack Gas Velocity in m/sec : 10.84  
Iso-kinetic Flow Rate in LPM : 37  
Duration of Sampling in minute : 27

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 19 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000000676F

FORMAT NO: CPL/FM/58

REPORT NO: CPL/R/SE/MAR-22/82

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/24**  
Name of Stack Monitored : CVRM - 2, Line - 1  
Stack Connected To : CVRM - 2 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 08.03.2022  
Time of Sampling : 11 : 13 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2019  
Sample Received on : 08.03.2022  
Date of Test : 09.03.2022

Ambient Temperature in °C : 32  
Stack Temperature in °C : 93  
Average Stack Gas Velocity in m/sec : 8.47  
Iso-kinetic Flow Rate in LPM : 29  
Duration of Sampling in minute : 34

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>23 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saseni*  
Test Done By

*Kapil*  
Verified By



*Subhanga Praharaj*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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Registered Office:

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000677F

FORMAT NO: CPL/FM/58

REPORT NO: CPL/R/SE/MAR-22/83

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/25**  
Name of Stack Monitored : CVRM - 3, Line - 1  
Stack Connected To : CVRM - 3 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 08.03.2022  
Time of Sampling : 10 : 07 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2019  
Sample Received on : 08.03.2022  
Date of Test : 09.03.2022

Ambient Temperature in °C : 23  
Stack Temperature in °C : 94  
Average Stack Gas Velocity in m/sec : 9.02  
Iso-kinetic Flow Rate in LPM : 31  
Duration of Sampling in minute : 32

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>07 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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Registered Office:

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000681F  
REPORT NO: CPL/R/SE/MAR-22/87

FORMAT NO: CPL/FM/58


REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED


Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/30**  
Name of Stack Monitored : KILN & VRM RABH, LINE - 2  
Stack Connected To : KILN VRM  
Shape of Stack : Circular  
Date of Sampling : 09.03.2022  
Time of Sampling : 14 : 33 Hrs  
Method of Sampling : IS 11255 (Part - 1), (Part - 2) : 1985, RA 2019 & (Part - 7): 2005, RA 2017  
Sample Received on : 09.03.2022  
Date of Test : 10.03.2022

Ambient Temperature in °C : 32  
Stack Temperature in °C : 94  
Average Stack Gas Velocity in m/sec : 10.51  
Iso-kinetic Flow Rate in LPM : 36  
Duration of Sampling in minute : 27

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 12 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 45.55 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 439.4 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

  
Test Done By



  
Authorized Signatory  
Subhanga Prahara  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC68162200000679F  
REPORT NO: CPL/R/SE/MAR-22/85

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/31**  
Name of Stack Monitored : Coal Mill B/F, Line – 2  
Stack Connected To : Coal Mill Bag Filter  
Shape of Stack : Circular  
Date of Sampling : 09.03.2022  
Time of Sampling : 15 : 29 Hrs  
Method of Sampling : IS 11255 (Part – 1): 1985, RA 2019  
Sample Received on : 09.03.2022  
Date of Test : 10.03.2022

Ambient Temperature in °C : 34  
Stack Temperature in °C : 73  
Average Stack Gas Velocity in m/sec : 8.89  
Iso-kinetic Flow Rate in LPM : 33  
Duration of Sampling in minute : 30

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	<b>: 06 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saseni*  
Test Done By



*Subhanga Praharaj*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC68162200000678F  
REPORT NO: CPL/R/SE/MAR-22/84

FORMAT NO: CPL/FM158

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

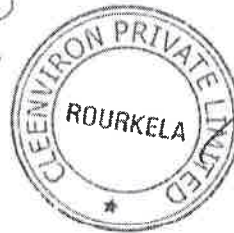
Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/MAR-22/26**  
Name of Stack Monitored : Cooler ESP, Line - 2  
Stack Connected To : Cooler, Line - 2  
Shape of Stack : Circular  
Date of Sampling : 08.03.2022  
Time of Sampling : 15 : 41 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2019  
Sample Received on : 08.03.2022  
Date of Test : 09.03.2022

Ambient Temperature in °C : 36  
Stack Temperature in °C : 128  
Average Stack Gas Velocity in m/sec : 7.32  
Iso-kinetic Flow Rate in LPM : 23  
Duration of Sampling in minute : 43

**Particulate Matter Concentration** : **Results Obtained** : **Permissible Limits**  
: **16 mg/Nm<sup>3</sup>** : **30 mg/Nm<sup>3</sup>**

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC68162200000665F

FORMAT NO: CPL/FMI/57

REPORT NO: CPL/R/AAQ/MAR-22/34

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/123
Location of Sampling	:	Near Stores Building (Line - 1)
Date of Sampling	:	07.03.2022 - 08.03.2022
Sampling Period	:	1005 - 0910 Hrs
Time of Sampling	:	23.05 Hrs
Sample Received on	:	08.03.2022
Date of Test	:	08.03.2022 - 09.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	26	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	68	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	20	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	71	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/MAR-22/34N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

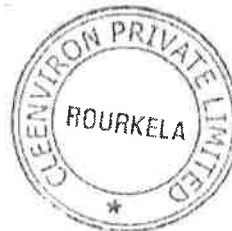
Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/123
Location of Sampling	:	Near Stores Building (Line – 1)
Date of Sampling	:	07.03.2022 – 08.03.2022
Sampling Period	:	1005 – 0910 Hrs
Time of Sampling	:	23.05 Hrs
Sample Received on	:	08.03.2022
Date of Test	:	08.03.2022 – 09.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR – TC68162200000669F

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/MAR-22/38

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341**

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C | Max. Temp.: 35.1°C | Min. RH: 25% | Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/122
Location of Sampling	:	Near Canteen Building (Line – 1)
Date of Sampling	:	07.03.2022 – 08.03.2022
Sampling Period	:	0921 – 0859 Hrs
Time of Sampling	:	23.38 Hrs
Sample Received on	:	08.03.2022
Date of Test	:	08.03.2022 – 09.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	34	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	88	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	16	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	60	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/MAR-22/38N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341**

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/122
Location of Sampling	:	Near Canteen Building (Line – 1)
Date of Sampling	:	07.03.2022 – 08.03.2022
Sampling Period	:	0921 – 0859 Hrs
Time of Sampling	:	23.38 Hrs
Sample Received on	:	08.03.2022
Date of Test	:	08.03.2022 – 09.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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TC - 6816

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC68162200000668F

FORMAT NO: CPLJFM/57

REPORT NO: CPL/R/AAQ/MAR-22/37

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/175
Location of Sampling	:	Near Loco Gate (Line - 1)
Date of Sampling	:	09.03.2022 - 10.03.2022
Sampling Period	:	1730 - 1610 Hrs
Time of Sampling	:	22.40 Hrs
Sample Received on	:	10.03.2022
Date of Test	:	10.03.2022 - 11.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	22	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	57	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	06	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	17	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	97	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Caseni*  
Test Done By

*M. Singh*  
Verified By



*Subhanga Praharaj*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:



# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/MAR-22/37N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

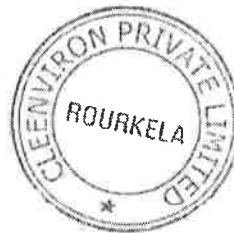
Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/175
Location of Sampling	:	Near Loco Gate (Line – 1)
Date of Sampling	:	09.03.2022 – 10.03.2022
Sampling Period	:	1730 – 1610 Hrs
Time of Sampling	:	22.40 Hrs
Sample Received on	:	10.03.2022
Date of Test	:	10.03.2022 – 11.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC68162200000664F

FORMAT NO: CPL/FM17

REPORT NO: CPL/R/AAQ/MAR-22/33

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN12341**

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/125
Location of Sampling	:	Near Workshop Building (Line - 2)
Date of Sampling	:	08.03.2022 - 09.03.2022
Sampling Period	:	1510 - 1510 Hrs
Time of Sampling	:	24.00 Hrs
Sample Received on	:	09.03.2022
Date of Test	:	09.03.2022 - 10.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	18	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	47	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	15	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	60	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM57

REPORT NO: CPL/R/AAQ/MAR-22/33N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN12341**

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C Max. Temp.: 35.1°C Min. RH: 25% Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/125
Location of Sampling	:	Near Workshop Building (Line – 2)
Date of Sampling	:	08.03.2022 – 09.03.2022
Sampling Period	:	1510– 1510 Hrs
Time of Sampling	:	24.00 Hrs
Sample Received on	:	09.03.2022
Date of Test	:	09.03.2022 – 10.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sasene*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC68162200000670F

FORMAT NO: CPL/FM17

REPORT NO: CPL/R/AAQ/MAR-22/39

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**

Environmental Conditions During Monitoring : Min. Temp.: 17.3°C | Max. Temp.: 35.1°C | Min. RH: 25% | Max. RH: 88%

Sample ID No	:	CPL/AAQ/MAR-22/176
Location of Sampling	:	Near Atithi Niwas
Date of Sampling	:	09.03.2022 - 10.03.2022
Sampling Period	:	1707 - 1647 Hrs
Time of Sampling	:	23.40 Hrs
Sample Received on	:	10.03.2022
Date of Test	:	10.03.2022 - 11.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	29	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	78	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	11	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	61	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Sasene*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM157

REPORT NO: CPL/RIAQ/MAR-22/39N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341**

Environmental Conditions During Monitoring	Min. Temp.: 17.3°C	Max. Temp.: 35.1°C	Min. RH: 25%	Max. RH: 88%
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Sample ID No	:	CPL/AAQ/MAR-22/176
Location of Sampling	:	Near Atithi Niwas
Date of Sampling	:	09.03.2022 – 10.03.2022
Sampling Period	:	1707 – 1647 Hrs
Time of Sampling	:	23.40 Hrs
Sample Received on	:	10.03.2022
Date of Test	:	10.03.2022 – 11.03.2022

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:

## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC681621000002533F  
REPORT NO: CPL/R/SE/DEC-21/67

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/54**  
Name of Stack Monitored : KILN & VRM LINE – 1  
Stack Connected To : KILN VRM  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 10 : 49 Hrs  
Method of Sampling : IS 11255 (Part – 1), (Part – 2) : 1985, RA 2014 & (Part – 7): 2005, RA 2017  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021

Ambient Temperature in °C : 25  
Stack Temperature in °C : 167  
Average Stack Gas Velocity in m/sec : 13.81  
Iso-kinetic Flow Rate in LPM : 39  
Duration of Sampling in minute : 25

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 06 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 10.82 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 386.1 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC68162100002532F  
REPORT NO: CPL/R/SE/DEC-21/66

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/53**  
Name of Stack Monitored : Coal Mill B/F, Line – 1  
Stack Connected To : Coal Mill Bag Filter  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 11 : 40 Hrs  
Method of Sampling : IS 11255 (Part – 1): 1985, RA 2014  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021

Ambient Temperature in °C : 27  
Stack Temperature in °C : 66  
Average Stack Gas Velocity in m/sec : 6.41  
Iso-kinetic Flow Rate in LPM : 24  
Duration of Sampling in minute : 41

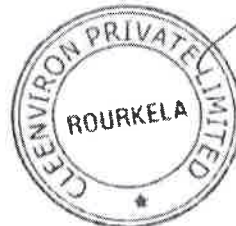
**Particulate Matter Concentration**

**Results Obtained**  
: 06 mg/Nm<sup>3</sup>

**Permissible Limits**  
30 mg/Nm<sup>3</sup>

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000002531F  
REPORT NO: CPL/R/SE/DEC-21/65

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/52**  
Name of Stack Monitored : Cooler ESP, Line - 1  
Stack Connected To : Cooler, Line - 1  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 12 : 48 Hrs  
Method of Sampling : IS 11255 (Part - 1) : 1985, RA 2014  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021


Ambient Temperature in °C : 27  
Stack Temperature in °C : 260  
Average Stack Gas Velocity in m/sec : 7.11  
Iso-kinetic Flow Rate in LPM : 17  
Duration of Sampling in minute : 58

**Particulate Matter Concentration**


**Results Obtained**  
: 09 mg/Nm<sup>3</sup>

**Permissible Limits**  
30 mg/Nm<sup>3</sup>

  
Test Done By

  
Verified By



  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC681621000002534F  
REPORT NO: CPL/R/SE/DEC-21/68

FORMAT NO: CPLJFM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/51**  
Name of Stack Monitored : CVRM – 1, Line – 1  
Stack Connected To : CVRM – 1 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 15 : 10 Hrs  
Method of Sampling : IS 11255 (Part – 1): 1985, RA 2014  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021

Ambient Temperature in °C : 27  
Stack Temperature in °C : 92  
Average Stack Gas Velocity in m/sec : 5.80  
Iso-kinetic Flow Rate in LPM : 20  
Duration of Sampling in minute : 50

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>09 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Sarani*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC681621000002535F  
REPORT NO: CPL/R/SE/DEC-21/69

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/50**  
Name of Stack Monitored : CVRM – 2, Line – 1  
Stack Connected To : CVRM – 2 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 16 : 18 Hrs  
Method of Sampling : IS 11255 (Part – 1): 1985, RA 2014  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021

Ambient Temperature in °C : 27  
Stack Temperature in °C : 96  
Average Stack Gas Velocity in m/sec : 5.67  
Iso-kinetic Flow Rate in LPM : 19  
Duration of Sampling in minute : 52

**Particulate Matter Concentration**

Results Obtained

Permissible Limits

: **16 mg/Nm<sup>3</sup>**

**30 mg/Nm<sup>3</sup>**

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC68162100002536F  
REPORT NO: CPL/R/SE/DEC-21/70

FORMAT NO: CPL/PM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/55**  
Name of Stack Monitored : CVRM – 3, Line – 1  
Stack Connected To : CVRM – 3 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 20.12.2021  
Time of Sampling : 17 : 38 Hrs  
Method of Sampling : IS 11255 (Part – 1); 1985, RA 2014  
Sample Received on : 20.12.2021  
Date of Test : 21.12.2021

Ambient Temperature in °C : 25  
Stack Temperature in °C : 98  
Average Stack Gas Velocity in m/sec : 6.69  
Iso-kinetic Flow Rate in LPM : 23  
Duration of Sampling in minute : 43

**Particulate Matter Concentration**

	<u>Results Obtained</u>	<u>Permissible Limits</u>
	: 05 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:

## TEST REPORT FOR STACK EMISSION MONITORING

ULR – TC681621000002540F  
REPORT NO: CPL/R/SE/DEC-21/74

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY GLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/60**  
Name of Stack Monitored : KILN & VRM RABH, LINE – 2  
Stack Connected To : KILN VRM  
Shape of Stack : Circular  
Date of Sampling : 21.12.2021  
Time of Sampling : 14 : 35 Hrs  
Method of Sampling : IS 11255 (Part – 1), (Part – 2) : 1985, RA 2014 & (Part – 7): 2005, RA 2017  
Sample Received on : 21.12.2021  
Date of Test : 22.12.2021

Ambient Temperature in °C : 28  
Stack Temperature in °C : 86  
Average Stack Gas Velocity in m/sec : 6.52  
Iso-kinetic Flow Rate in LPM : 23  
Duration of Sampling in minute : 43

**Particulate Matter Concentration**  
**Sulphur Dioxide as SO<sub>2</sub>**  
**Nitrogen Dioxide as NO<sub>2</sub>**

### Results Obtained

: 05 mg/Nm<sup>3</sup>  
: 37.19 mg/Nm<sup>3</sup>  
: 418.2 mg/Nm<sup>3</sup>

### Permissible Limits

30 mg/Nm<sup>3</sup>  
100 mg/Nm<sup>3</sup>  
800 mg/Nm<sup>3</sup>

*P. Sasaki*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000002538F  
REPORT NO: CPL/R/SE/DEC-21/72

FORMAT NO: CPL/EM/58

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/58**  
Name of Stack Monitored : Coal Mill B/F, Line - 2  
Stack Connected To : Coal Mill Bag Filter  
Shape of Stack : Circular  
Date of Sampling : 21.12.2021  
Time of Sampling : 15 : 45 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
Sample Received on : 21.12.2021  
Date of Test : 22.12.2021

Ambient Temperature in °C : 26  
Stack Temperature in °C : 74  
Average Stack Gas Velocity in m/sec : 6.85  
Iso-kinetic Flow Rate in LPM : 25  
Duration of Sampling in minute : 40

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>05 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000002537F  
REPORT NO: CPL/R/SE/DEC-21/71

FORMAT NO: CPLJFM/59

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/DEC-21/59**  
Name of Stack Monitored : Cooler ESP, Line - 2  
Stack Connected To : Cooler, Line - 2  
Shape of Stack : Circular  
Date of Sampling : 21.12.2021  
Time of Sampling : 16 : 50 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
Sample Received on : 21.12.2021  
Date of Test : 22.12.2021

Ambient Temperature in °C : 27  
Stack Temperature in °C : 83  
Average Stack Gas Velocity in m/sec : 5.00  
Iso-kinetic Flow Rate in LPM : 18  
Duration of Sampling in minute : 55

**Particulate Matter Concentration**

**Results Obtained**  
: 08 mg/Nm<sup>3</sup>

**Permissible Limits**  
30 mg/Nm<sup>3</sup>

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPUFMI57

ULR - TC681621000002524F

REPORT NO: CPL/R/AAQ/DEC-21/33

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/241
Location of Sampling	:	Near Stores Building (Line - 1)
Date of Sampling	:	20.12.2021 - 21.12.2021
Sampling Period	:	1050 - 1045 Hrs
Time of Sampling	:	23.55 Hrs
Sample Received on	:	21.12.2021
Date of Test	:	21.12.2021 - 22.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	27	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	69	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	13	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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Registered Office:

# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/DEC-21/33N

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/241
Location of Sampling	:	Near Stores Building (Line – 1)
Date of Sampling	:	20.12.2021 – 21.12.2021
Sampling Period	:	1050 – 1045 Hrs
Time of Sampling	:	23.55 Hrs
Sample Received on	:	21.12.2021
Date of Test	:	21.12.2021 – 22.12.2021

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FMG7

ULR – TC681621000002528F

REPORT NO: CPL/R/AAQ/DEC-21/37

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/291
Location of Sampling	:	Near Canteen Building (Line – 1)
Date of Sampling	:	23.12.2021 – 24.12.2021
Sampling Period	:	0920 – 0912 Hrs
Time of Sampling	:	23.52 Hrs
Sample Received on	:	24.12.2021
Date of Test	:	24.12.2021 – 25.12.2021

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	24	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	63	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	21	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	29	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saveni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/DEC-21/36N

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C | Max. Temp.: 28.5°C | Min. RH: 31% | Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/291
Location of Sampling	:	Near Canteen Building (Line – 1)
Date of Sampling	:	23.12.2021 – 24.12.2021
Sampling Period	:	0920 – 0912 Hrs
Time of Sampling	:	23.52 Hrs
Sample Received on	:	24.12.2021
Date of Test	:	24.12.2021 – 25.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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TC - 6816

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000002529F

FORMAT NO: CPL/PM/57

REPORT NO: CPL/R/AAQ/DEC-21/38

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/290
Location of Sampling	:	Near Atithi Niwas
Date of Sampling	:	23.12.2021 - 24.12.2021
Sampling Period	:	0905 - 0857 Hrs
Time of Sampling	:	23.52 Hrs
Sample Received on	:	24.12.2021
Date of Test	:	24.12.2021 - 25.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	20	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	53	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	21	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/IM/57

REPORT NO: CPL/IAAQ/DEC-21/37N

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY GLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/290
Location of Sampling	:	Near Atithi Niwas
Date of Sampling	:	23.12.2021 – 24.12.2021
Sampling Period	:	0905 – 0857 Hrs
Time of Sampling	:	23.52 Hrs
Sample Received on	:	24.12.2021
Date of Test	:	24.12.2021 – 25.12.2021

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Referred Office:



# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR – TC681621000002527F

FORMAT NO: CPLJFM/57

REPORT NO: CPL/R/AAQ/DEC-21/36

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/242
Location of Sampling	:	Near Loco Gate (Line – 1)
Date of Sampling	:	20.12.2021 – 21.12.2021
Sampling Period	:	1030 – 1024 Hrs
Time of Sampling	:	23.54 Hrs
Sample Received on	:	22.12.2021
Date of Test	:	22.12.2021 – 23.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	30	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	78	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	15	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	25	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/PM/57

REPORT NO: CPLR/AAQ/DEC-21/35N

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341**

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/242
Location of Sampling	:	Near Loco Gate (Line – 1)
Date of Sampling	:	20.12.2021 – 21.12.2021
Sampling Period	:	1030 – 1024 Hrs
Time of Sampling	:	23.54 Hrs
Sample Received on	:	22.12.2021
Date of Test	:	22.12.2021 – 23.12.2021

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:

Branch Office & Laboratory



# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR – TC681621000002523F

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/DEC-21/32

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN12341

Environmental Conditions During Monitoring : Min. Temp.:8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/288
Location of Sampling	:	Near Workshop Building (Line – 2)
Date of Sampling	:	21.12.2021 – 22.12.2021
Sampling Period	:	1332– 1040 Hrs
Time of Sampling	:	20.28 Hrs
Sample Received on	:	23.12.2021
Date of Test	:	23.12.2021 – 24.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	21	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	56	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	06	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	20	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	25	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Registered Office:

# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/DEC-21/32N

REPORT ISSUE DATE: 30.12.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN12341**

Environmental Conditions During Monitoring : Min. Temp.: 8.1°C Max. Temp.: 28.5°C Min. RH: 31% Max. RH: 99%

Sample ID No	:	CPL/AAQ/DEC-21/288
Location of Sampling	:	Near Workshop Building (Line – 2)
Date of Sampling	:	21.12.2021 – 22.12.2021
Sampling Period	:	1332– 1040 Hrs
Time of Sampling	:	20.28 Hrs
Sample Received on	:	23.12.2021
Date of Test	:	23.12.2021 – 24.12.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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This report refers to the values obtained at the time of testing and results related to the item tested. This report may not be reproduced in part or full without written permission of the Company.

Registered Office:

Branch Office: Bhubaneswar